

REMARKS

The Office Action dated May 17, 2007 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 2-5 and 9 have been amended to more particularly point out and distinctly claim the subject matter of the invention. No new matter has been added. Claims 1-13 are submitted for consideration.

Claims 1-13 were rejected under 35 U.S.C. 102(b) as being anticipated by European Application No. 0891114 to Bautz (hereinafter Bautz). The rejection is traversed as being based on a reference that neither teaches nor suggests the novel combination of features clearly recited in claims 1 and 20.

Claim 1, upon which claims 2-4 depend, recites a method of sending packet data units for unacknowledged mode services in a handover between base stations in a mobile communications network. The network includes a network node connected to at least a first base station and a second base station, and user equipment connected to at least one of the first and second base stations. The method includes transmitting packet data units in an acknowledged mode radio link control entity between a transmitting side and a receiving side and setting a retransmission parameter so that the packet data units are not retransmitted to the first base station when receiving status reports for sent packet data units from the receiving side. The method also includes buffering transmitted packet data units in a retransmission buffer and receiving status reports for the sent packet data units

from the receiving side. The method further includes purging the packet data units from the retransmission buffer based on the received status reports and scheduling remaining packet data units in the retransmission buffer for transmission to the second base station. The method also includes transmitting the scheduled remaining packet data units to the second base station.

Claim 5, upon which claims 6-8 depend, recites a system of sending packet data units for unacknowledged mode services in a handover between base stations in a mobile communications network. The system includes a network node connected at least to a first base station and a second base station and user equipment connected to at least one of the first or the second base stations. The system also includes a transmitter configured to transmit packet data units in an acknowledged mode radio link control entity between a transmitting side and a receiving side and a retransmission buffer for buffering transmitted packet data units. The system further includes a setting unit configured to set a retransmission parameter so that the packet data units are not retransmitted to the first base station when receiving status reports for sent packet data units from the receiving side. The system also includes a receiver configured to receive the status reports for the sent packet data units from the receiving side and a management unit configured to purge the packet data units from the retransmission buffer based on the received status reports and to schedule remaining packet data units in the retransmission buffer for transmission to the second base station. The transmitter is configured to transmit the scheduled packet data units to the second base station.

Claim 9, upon which claims 10-12 depend, recites an acknowledged mode transmitting side protocol entity for sending packet data units for unacknowledged mode services in a handover between base stations in a mobile communications network. The entity includes a transmitter configured to transmit packet data units in an acknowledged mode radio link control entity between a transmitting side and a receiving side and a retransmission buffer for buffering transmitted packet data units. The entity also includes a setting unit configured to set a retransmission parameter so that the packet data units are not retransmitted to the first base station when receiving status reports for sent packet data units from the receiving side. The entity further includes a receiver configured to receive the status reports for the sent packet data units from the receiving side and a management unit configured to purge packet data units from the retransmission buffer based on the received status reports and to schedule remaining packet data units in the retransmission buffer for transmission to the second base station. The transmitter is configured to transmit the scheduled packet data units to the second base station.

Claim 13 recites a system for sending packet data units for unacknowledged mode services in a handover between base stations in a mobile communications network. The network includes a network node connected to at least a first base station and a second base station, and user equipment connected to at least one of the first and second base stations. The system includes transmitting means for transmitting packet data units in an acknowledged mode radio link control entity between a transmitting side and a receiving side and setting means for setting a retransmission parameter so that the packet data units

are not retransmitted to the first base station when receiving status reports for sent packet data units from the receiving side. The system also includes buffering means for buffering transmitted packet data units in a retransmission buffer and receiving means for receiving status reports for the sent packet data units from the receiving side. The system further includes purging means for purging the data units from the retransmission buffer based on the received status reports and scheduling means for scheduling remaining packet data units and the retransmission buffer for transmission to the second base station. The system also includes transmitting means for transmitting the scheduled remaining packet data units to the second base station.

As outlined below, Bautz does not teach or suggest all of the elements of the pending claims.

Bautz discloses a method and system for performing an optimized handover between a first base station and a second base station, wherein a mobile terminal requests a handover. Data segments, sent to a first base station, are stored on the path to the second base station, for example in a buffer. In one embodiment, the segments are stored in the second base station. After the handover is executed, the mobile terminal requests a desired segment from the buffer, by explicitly signaling the corresponding segment number.

Applicants submit that Bautz does not teach or suggest each of the elements of the pending claims. Each of the pending claims, in part, recites transmitting packet data units in an acknowledged mode radio link control entity between a transmitting side and a

receiving side. In the present invention, the transmitting side of the radio link control entity includes a retransmission buffer. As recited in the pending claims, a retransmission parameter is set so that data packets are not retransmitted to a first base station when receiving status reports (either positive or negative) from a user terminal. Each of the pending claims further recites that all the data packets from which status reports have been received are removed from the retransmission buffer and the data packets remaining in the buffer are finally transmitted to a second base station. Bautz does not teach or suggest these features.

Specifically, Bautz does not teach or suggest acknowledged or unacknowledged mode transmission. Bautz also does not teach or suggest that acknowledged mode transmission could be used for unacknowledged mode services, e.g. for streaming. In Bautz, every data segment is simply sent to the first base station and at the same time to the second base station in a handover situation. The Office Action alleged that Bautz discloses the existence and use of a retransmission parameter. Col. 2, lines 9-24 of Bautz discusses retransmissions only in general. Applicants submit that the use of the retransmission parameter is closely related to the acknowledged mode radio link control entity. However, Bautz does not teach or suggest acknowledged mode radio link control entity and it does not teach or suggest the use of the retransmission parameter.

The Office Action also alleged that Bautz teaches the steps of receiving status reports and purging data packet units from the retransmission buffer based on the status

reports. Bautz teaches that the mobile terminal requests a specific segment (SX) from the second base station. It should be noted that this request does not identify which segments the mobile station has already received. The request only specifies the segment the mobile station wants to receive. Although "storing the segments on a second communication path", when widely interpreted, may be regarded as a retransmission buffer, Bautz does not teach that the retransmission buffer is maintained based on the status reports. In the present invention, the retransmission buffer is maintained based on the status reports so that all packet data units that have been either positively or negatively acknowledged are purged from the retransmission buffer.

Furthermore, in Bautz the overall result is that the requested segment is sent to the mobile station. In the present invention, on the other hand, the overall result is that all packet data units left in the retransmission buffer after the purging step are transmitted to the second base station and further to a mobile station. Therefore, Bautz discloses a process where the second base station is sent a lot of 'unnecessary' segments because the switch does not beforehand know the segment the mobile station is going to request from the second base station. Based on the distinctions noted above, Applicants respectfully assert that the rejection under 35 U.S.C. §102(b) should be withdrawn because Bautz does not teach or suggest each feature of claims 1, 5, 9 and 13 and hence, dependent claims 2-4, 6-8 and 10-12 thereon.

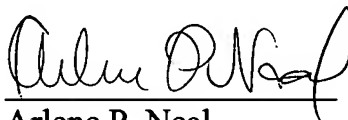
As noted previously, claims 1-13 recite subject matter which is neither disclosed nor suggested in the prior art references cited in the Office Action. It is therefore

respectfully requested that all of claims 1-13 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



Arlene P. Neal
Registration No. 43,828

Customer No. 32294
SQUIRE, SANDERS & DEMPSEY LLP
14TH Floor
8000 Towers Crescent Drive
Tysons Corner, Virginia 22182-2700
Telephone: 703-720-7800
Fax: 703-720-7802

APN:ksh